EMPIRICAL MARINE LIFE IN LEGAL WATERS: CLAMS, DOLPHINS, AND PLANKTON

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The future of empirical scholarship in the legal academy will hinge on the nature and level of exchange between traditional and empirically minded scholars, and on the academy's reaction to the exchange. In this article, Professor Diamond describes the range of legal research that can be characterized as empirical, and illustrates the interconnectedness of empirical and nonempirical research. She next offers a typology that describes how three general categories of scholars view empirical research, and the different forms that their interactions with empirical scholarship can take. She then explains how shifts in category occupancy within the typology are likely to affect both the quality of empirical research on law and the future of empiricism in the legal academy.

The legal academy is astonishingly heterogeneous in its reaction to the systematic empirical inquiry that characterizes social science. The range in response goes from welcoming and curious, with a striking eagerness to learn from empirical literature and activity, and even to mount or join empirical investigations that attempt to understand law, to a tenacious insistence that social scientific inquiry lacks any value for, or relevance to, serious legal scholarship. The future of the interaction between law and social science in law schools will depend on how those various perspectives develop and change, the extent to which the pockets of hostility persist, and the level and nature of exchange between legal scholars and social scientists interested in law. Not incidentally, the success of the exchange will also influence the quality of the empirical work that is produced by scholars studying law and legal institutions, because empirical social scientists have much to learn from their legally trained colleagues.

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Thanks are due to the participants in the Symposium on Empirical Research held at the University of Illinois in Champaign in April 2001. They convinced me that the sharks in the earlier version of the typology presented here conveyed an image of power and energy that was unintended. I have replaced the sharks with clams, a more suitable choice on a variety of dimensions.

In considering current reactions to empirical research within the legal academy, I will offer a typology that can be used to describe the positions occupied by various legal academics and judges vis-à-vis empirical studies of the law. In describing the positions in this typology, I will suggest what motivates and supports scholars who occupy them, where changes are most likely to occur in the future, and what consequences those changes will have for empirical research about law and for the role of empirical work in the legal academy. Although I will draw on a series of examples in describing each position within the typology, I anticipate that most readers will find that at least some of the types I identify are familiar and will recognize among their colleagues one or more who occupy these categories.

I. WHAT IS EMPIRICAL RESEARCH?

Before identifying categories of response to empirical research, it is important to delineate what is meant by empirical when we speak of studies of law and legal institutions. When some scholars talk about empiricism, they assume that quantitative analysis is an inherent part of empirical work.[1] Standard dictionaries do not impose that constraint, defining the word empirical as "[r]elying upon or derived from observation or experiment."[2] The definition in *Black's Law Dictionary* is even broader: "[t]hat which is based on experience, experiment, or observation."[3] According to either definition, the category must encompass qualitative as well as quantitative analysis. Thus, an interview study might compile a report on the percentage of respondents who were able to describe a situation in which they thought they were entitled to sue, but chose not to file suit. Alternatively, a nonquantitative version of the same study might focus on describing in detail, based on the interviews, the range of types of responses that injured individuals make regarding their injuries—without attempting to assess the frequency with which the different responses occur. Both studies would be based on observation; both would be empirical. Nonempirical scholarship on the same theme might be a description or model that predicts, based on the scholar's assumptions about what might motivate people to sue, how people will react to injury under various contingencies. The model may be based in part on empirical research (e.g., the finding that many people who experience injury do not enlist any help from the legal system). Moreover, the model itself may be susceptible to empirical testing. Nonetheless, the modeler's work alone is not empirical research.

1. *See, e.g.*, Michael Heise, *The Importance of Being Empirical*, 26 PEPP. L. REV. 807, 810 (1999).
2. AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 586 (4th ed. 2000).
3. BLACK'S LAW DICTIONARY 471 (5th ed. 1979).

Similarly, the legal scholar who analyzes when an individual should be entitled to turn to the legal system for help following an injury is conducting traditional normative legal scholarship. This scholar may draw on legal theory, produce an imaginative result, and apply impressive analytic powers to reason about her normative position, but her work would not constitute empiricism unless she attempted to examine how people actually behave.

It is, in addition, somewhat misleading to view the categories of empirical and nonempirical as mutually exclusive. If the nonempirical is limited to scholarship based on something other than observation, it is hard to imagine how any analytic writing, apart from pure mathematical proofs (e.g., if 1 + 3 = 4, and 2 + 2 = 4, then 1 + 3 = 2 + 2) and strictly normative assertions (e.g., thou shalt not kill), can be completely inattentive to empirically derived information. When constitutional scholars debate what the framers would have done if faced with regulating the Internet, the debate must be based on a series of assumptions about the way human beings behave. Those assumptions must come from somewhere and observation of other human beings is a likely source.

When social scientists complain that an anecdote is an unsatisfactory source of evidence, they are not saying that the anecdote is nonempirical (as the saying goes, the plural of anecdote is data), but rather that it is a weak form of empirical evidence because it typically is presented without information about how the particular instance described in the anecdote was selected, how accurately it is being described, and how representative it is of the population of occurrences the author is using it to illustrate. In contrast, good empirical research typically involves the systematic organization of a series of observations with the method of data collection and analysis made available to the audience. The research is sometimes designed to describe some phenomenon (e.g., how business people resolve disputes), but more often to test a particular hypothesis or theory (e.g., to what extent does contract law influence dispute resolution?). Nonempirical research, in contrast, tends to rely exclusively on reason and analysis rather than external sources of information, on theories that presume to describe the world (e.g., the market place notion that freedom of speech will eventually lead people to reject political perspectives that advocate hate) rather than hypotheses that have been subjected to empirical testing. In principle, the presumptions relied on by nonempiricists may be correct, but while the empiricist would approach the presumption as problematic and consider it worth investigating to see whether it is possible to find evidence to support (or reject) the presumption, the nonempiricist is either willing to presume that it is correct, or at least is not interested in testing the presumption.

Another common way to describe the divide between empirical and nonempirical research is to ask what questions the researcher is trying to address. For empiricists studying the law, the question is usually about

how law and legal institutions actually behave and with what effects. For nonempiricists, the question more often is about how they ought to behave. But again, note the close connection that frequently arises between these questions. At a purely normative level, one might ask, should same-sex partners be permitted to adopt children? Pure reasoning based on an analysis of consistency or inconsistency with other relevant legal standards can supply an answer, but for many scholars, the question begs for empirical information about how children in such environments are treated and how they develop (relative to children adopted into other situations, children conceived and raised by their natural parents, and children raised under state care). While a purely doctrinal analyst might be willing to ignore the empirical evidence, if the legal standard is defined as "the best interests of the child," the standard itself strongly suggests the relevance of empirical evidence for analysis.

Empirical research comes in many forms. A brief look at recent work by researchers at the American Bar Foundation (ABF), a research organization whose mission is the social scientific study of law and legal institutions, is illustrative.[4] It includes: (i) detailed case studies on the ground, where researchers focused on a few cases involving claims of employment discrimination based on the controversial theory of comparable worth, studying thousands of documents and interviewing the participants on all sides of the disputes;[5] (ii) archival analyses tracing the treatment of labor law in eighteenth-century America[6] and studies of the frequency and pattern of bench and jury decisions on punitive damages;[7] (iii) research using intensive interviews to gain insights about the nonpublic behavior of law on topics such as how attorneys handle conflict of interest,[8] and how international arbitrators deal with disputes that involve parties who come from vastly different legal cultures;[9] (iv) laboratory experiments which test the effects of bifurcating the presentation of the trial evidence on the judgments of simulated juries,[10] and those that test the extent to which the severity and typicality of the consequences produced by a crime influence judgments about the punishment that the defendant should receive; (v) observational studies used to assess the

4. I use this illustration both because research fellows at the ABF are drawn from a variety of disciplines (e.g., anthropology, economics, history, political science, psychology, and sociology) and because I am so familiar with the range of research conducted by my colleagues there.

5. *See generally* ROBERT L. NELSON & WILLIAM P. BRIDGES, LEGALIZING GENDER INEQUALITY: COURTS, MARKETS, AND UNEQUAL PAY FOR WOMEN IN AMERICA (1999).

6. *See generally* CHRISTOPHER L. TOMLINS, LAW, LABOR AND IDEOLOGY IN THE EARLY AMERICAN REPUBLIC (1993).

7. *See generally* STEPHEN DANIELS & JOANNE MARTIN, CIVIL JURIES AND THE POLITICS OF REFORM (1995).

8. *See generally* SUSAN SHAPIRO, TANGLED LOYALTIES (forthcoming 2002).

9. *See generally* YVES DEZALAY & BRYANT G. GARTH, DEALING IN VIRTUE: INTERNATIONAL COMMERCIAL ARBITRATION AND THE CONSTRUCTION OF A TRANSNATIONAL LEGAL ORDER (1996).

10. *See generally* Stephan Landsman et al., *Be Careful What You Wish For: The Paradoxical Effects of Bifurcating Claims for Punitive Damages*, 1998 WIS. L. REV. 297.

roles of race and gender in law school classrooms and behavior;[11] and (vi) field experiments that randomly assign cases in the field to conditions in order to test the effects of a particular change, such as one permitting jurors in some cases to discuss the case amongst themselves, while jurors in other cases were given the traditional admonition to refrain from discussion until the end of the case.[12] The methods of empirical research on the law and legal institutions are thus highly varied. What they all have in common, however, is an orientation to evidence that requires more than armchair speculation.

With this background in mind, it is easier to see why those who do empirical research on the law and those who would characterize their own work as purely doctrinal may have more to say to each other than the tendency to divide the academy into the empirical and nonempirical would suggest. And indeed, as the typology below demonstrates, there are varieties of exchange between the two camps.

II. THE EMPIRICISM TYPOLOGY

Figure 1 introduces an empiricism typology which describes how empirical methods are used and reacted to by members of the legal academy.

FIGURE 1
PERSPECTIVES ON EMPIRICAL METHODS IN LAW

	Clam	**Dolphin**	**Plankton**
Doer	Religion	Tool	Service
User	Ornament	Enrichment/ Opportunity	Fashion
Critic	Irrelevant/ Unnecessary	Stimulation	Fad (-)

The general typology divides the legal academy into three species of researchers—clams, dolphins, and plankton—with researchers within each species taking one of three positions—that of a doer, user, or critic of empirical research. Although at any one time each inhabitant of this world is likely to be located principally in one category, locations in both the rows and the columns are susceptible to change. Inhabitants can

11. *See generally* Elizabeth Mertz, *What Differences Does Difference Make? The Challenge for Legal Education*, 48 J. LEGAL EDUC. 1 (1998).

12. SHARI SEIDMAN DIAMOND ET AL., JUROR DISCUSSIONS DURING CIVIL TRIALS: A STUDY OF ARIZONA'S RULE 39(f) INNOVATION, FINAL REPORT (2002); Shari Seidman Diamond & Neil Vidmar, *Jury Room Ruminations on Forbidden Topics*, 87 VA. L. REV. 1857, 1868–69 (2001).

float (or more probably intentionally swim) across categories on particular occasions, and they can migrate permanently from one category to another. The ebb and flow of these changes will determine the future of empirical scholarship in the legal academy.

III. AN OVERVIEW OF THE SPECIES AND POSITIONS

The **Clam** species is relatively immobile. It lacks eyes and a distinct head, limiting its ability to actively search its environment. Clams can tolerate somewhat degraded living conditions, and the key to their survival is the steady supply of potential food sources that drift by them. They are able to use their gills as a filter to trap a variety of food material. Although clams sometimes extend their soft, fleshy body from the shell, the shell generally protects them and their movement is usually limited to burrowing in the sand. The shell enables them to trap potential nutrients that float by, but also to close out unwelcome intruders if they are irritated. Whether users, doers, or critics of empirical research, the reactions of the clams are relatively mechanical and primitive. Like their namesake, legal clams will clamp down either to take in or to close out any empirical research that comes their way, failing in both modes to evaluate the quality of the evidence they accept or reject.

The **Dolphin**, in contrast, is an active inhabitant of its marine environment, noted for its intelligence, ingenuity, and playfulness. In addition, dolphins are social creatures who display curiosity and enjoy interaction. Not incidentally, dolphins were often mentioned by early writers as a rescuer for those lost at sea. As a species, they are crucial to the survival of empirical research in the legal academy. Legal dolphins can be a source of energy and perspective for the academy, expanding the repertoire of legal scholarship as well as recognizing weaknesses in conclusions drawn from some empirical research.

The final species in this group is the **Plankton**. This large category of organic and inorganic material includes both the jellyfish and the man-of-war. Its inhabitants exist in a drifting, floating state, too weak to swim against the current. Academics in this species use or provide empirical research to colleagues as needed, serving others without contributing directly to the field. They use the method of the moment, arguing for or against empiricism depending on the season. The plankton, however, though far down the food chain, is an important source of food for the clams, so that its potential influence extends farther than its somewhat rudderless pattern of activity might suggest.

Each species of legal scholar also typically occupies one of three positions regarding her use of empirical research. The positions taken by these various species in legal scholarship, and represented by the rows in Figure 1, include the **Doer**, the **User**, and the **Critic**. The **Doer** actually engages in empirical research. A minority within the legal academy, the

doer may or may not conduct that research with great skill or select questions of great interest. The doer is merely defined by the fact that she attempts to use empirical methods in conducting her research.

In contrast, the **User** does not conduct empirical research, but cites the empirical work of others to support arguments the user wishes to make. For example, in arguing that it is (or is not) appropriate to permit the adoption of children by homosexual couples, the user of empirical work might cite research showing that children raised in such circumstances were performing as well as (or not as well as) a comparison group of children raised in other circumstances.

Finally, the **Critic** occupies the third stance in response to empirical research. The critic may be active or passive, engaging or refusing to engage and debate the value of empirical work. Moreover, the active critic can be destructive or constructive. Indeed, one distinctive characteristic of the legal academy is the norm of exchanging drafts and reprints among colleagues. In other parts of the university, specialists often speak and exchange papers only with colleagues, not necessarily at their own institution, who share their own, frequently narrow, area of specialization. Members of the legal academy, perhaps because legal academics are less likely to define themselves narrowly, are more inclined to share their own work and to offer comments on the work of their colleagues.

This brief characterization of the dimensions of the empiricism typology may suggest to the reader that the typology captures everyone in its net, either as a doer, a user, or a critic. It is important to point out that the legal world cannot, and should not, be defined solely in terms of its interaction with empiricism. Purely normative scholarship may appropriately find actual behavior irrelevant. A philosophical or textually based argument that residents who are not citizens should be subject to the draft does not need to rely on quantitative assessments of the services that such noncitizens receive, or the record of loyal service they have rendered in the U.S. military. Members of the academy, rather than actively or passively resisting the pursuit of empirical questions, may simply be asking questions in ways that do not engage issues of how people actually behave.

IV. How the Dimensions of the Empiricism Typology Interact

A. Clams

We begin in the upper left hand cell with the **Clam/Doer**. Empirical methods can be applied to any question, but their value depends on both the question and the methods chosen. The clam/doer is indiscriminate. Empirical methods are her religion and she will clamp down on any issue with whatever empirical tools are perceived to be at hand. Recall that her search is limited by her immobility. Such an opportunistic approach can sometimes yield insights, but only if the fit between question and

method happens to be good. Suppose, for example, that the question is whether plaintiffs raising claims of age discrimination are more likely to be successful than plaintiffs raising claims of sex discrimination under Title VII. The clam/doer logs on to LEXIS or WESTLAW and captures a series of reported case dispositions, recording the win rates for plaintiffs alleging different types of discrimination claims. Easily done, the method produces an answer, but the answer will potentially be quite misleading. A substantial portion of filed cases[13] never reach a formal disposition because they may be settled or dropped. In addition, judges frequently do not write decisions even when the case ends with a formal disposition. And if the verdict is rendered by a jury, there will be no reported opinion at all unless the case is appealed and results in a formal disposition. Without knowing the number and nature of the cases filed, no meaningful comparison of success rates can be computed.

Researchers who regularly conduct empirical studies can also exhibit clam/doer behavior when they take a powerful research tool and misapply it to a question about law. A common mistake is the failure to appreciate crucial elements of the legal context for the research question being addressed. For example, the use of court-appointed experts has recently drawn attention and concern. Justice Breyer[14] and others[15] have called upon courts to make greater use of Rule 706[16] which permits federal judges to appoint an expert who will not be employed by either party, although the parties will be called upon to share the cost of the expert's fee. In any court hearing that results, each party has the opportunity to cross-examine the expert if the party wishes to do so. In one of the few studies that has been conducted on how jurors are likely to react to court-appointed as opposed to party-appointed experts, a laboratory experiment was set up in which the judge was the only one who questioned the court-appointed expert, thereby removing cross-examination by the adversaries as a source of influence on the way that the decision makers evaluated the expert's testimony.[17] That omission simplified the experiment, but at the cost of removing a crucial element from the research design.

Finally, the measures increasingly available in on-line data sets require some sophistication about their limitations, a sensitivity that the eager clam/doer lacks. Apparently straightforward concepts can be measured in a variety of ways. For example, on its face, the concept 'hung jury' appears unambiguous. Yet hung jury rates are not recorded

13. For one estimate of between forty and sixty percent, see Herbert M. Kritzer, *Adjudication to Settlement: Shading in the Gray*, 70 JUDICATURE 161, 164 (1986).

14. Stephen Breyer, *The Interdependence of Science and Law*, 280 SCIENCE 537 (1998).

15. *See, e.g.*, JACK B. WEINSTEIN, INDIVIDUAL JUSTICE IN MASS TORT LITIGATION: THE EFFECT OF CLASS ACTIONS, CONSOLIDATIONS, AND OTHER MULTIPARTY DEVICES 116 (1995).

16. *See* FED. R. EVID. 706.

17. Nancy J. Brekke et al., *Of Juries and Court-Appointed Experts: The Impact of Nonadversarial Versus Adversarial Expert Testimony*, 15 LAW & HUM. BEHAV. 451, 459–60 (1991).

according to the same criterion across courts. Should an outcome be counted as a hung jury if the jurors reached a unanimous verdict on two of the charges, but could not resolve their differences on the third? The rate of hung juries can be affected substantially by the answer to this question.[18] Similarly, the measurement may be clear and unambiguous, but it may not reflect the underlying topic of interest. For example, researchers are frequently interested in how likely it is that the plaintiff will win under various conditions (e.g., if the trial is before a judge or a jury). Many studies have suggested that the win-rate before juries in tort cases is roughly fifty-fifty.[19] Whether that rate is considered high or low, it is probably misleading. In some trials, liability is conceded and the trial is held solely to decide on damages. In others, the defendant admits to some liability but argues that the plaintiff is partially at fault. In both of these situations the plaintiff *must* "win." That is, the defendant must be found liable.[20] If liability is contested more (or less) often in trials that end up being decided by juries than in those decided by judges, the researcher must control for that preordained set of plaintiff wins in any comparison. Note that court administrative reports on verdict outcomes will not provide the needed underlying data.[21]

As these examples suggest, the clam/doer can be an enthusiastic contributor to empirical work, but the work will frequently be flawed in significant ways because the fit between the research question and the data collected are the product of serendipity—the clam/doer will grasp with empirical jaws whatever swims or floats by, indiscriminately pulling it in.

The second member of this species is the **Clam/User**. Like the clam/doer, this character, increasingly common in legal scholarship, shows some enthusiasm for empirical research, but her lack of judgment in its use can give that research a bad name. Empirical cites often appear in her writing, sometimes in footnotes but also in the text. Empirical findings are an ornament used to support a theory or position that the author would adopt in the absence of the empirical findings. Two qualities characterize this use of empirical work: (1) a selective use of the empirical literature, citing only what supports the author's position; and (2) an uncritical eye on the quality of what is being cited. A typical instance of such use of empirical research appeared recently in an article on the potential dangers of nonunanimous jury verdicts for silencing the voice

18. Paula L. Hannaford et al., *How Much Justice Hangs in the Balance? A New Look at Hung Jury Rates*, 83 JUDICATURE 59 (1999).

19. CAROL J. DEFRANCES & MARIKA F.X. LITRAS, CIVIL TRIAL CASES AND VERDICTS IN LARGE COUNTIES 1996 (Bureau of Justice Statistics Bulletin, NCJ173426, Sept. 1999).

20. There is one exception: in some jurisdictions, the plaintiff can recover only if the trier of fact determines that the plaintiff is not fifty percent or more at fault. The text assumes the more common regime of pure comparative fault in which the plaintiff will receive a damage award if any fault at all is attributed to the defendant.

21. *See* Diamond & Vidmar, *supra* note 12, at 1872 n.54.

of minorities during deliberations.[22] In citing a meta-analysis of studies examining the influence of defendant race on sentencing judgments, the author claimed that the researchers who had conducted the meta-analysis had "established that the central factor in determining a defendant's guilt or innocence was race."[23] In fact, the analysis did no such thing.[24] Race was *a* factor—not the *central* factor. Nor could it have been anything else. The studies reviewed in the article only examined whether race had any effect and did not compare how outcomes were affected by race versus other variables such as socioeconomic status or strength of evidence. The studies reviewed for the meta-analysis all were selected because the effect of race could be examined independently of those other factors that might influence outcomes. Moreover, the meta-analysis explicitly examined studies of *sentencing* judgments, not studies in which the research evaluated the effect of the defendant's race on judgments about guilt or innocence. As many authors have recognized, the two types of judgments are legally distinct, and may stimulate different processes of decision making.[25]

Why did these fairly blatant errors occur? One possibility is that the author simply misread the article being reviewed and failed to recognize some important distinctions. A second possibility is that the methodology of meta-analysis was unfamiliar and therefore confusing, so that the author did not understand that the analysis had nothing to say about the relative influence of the race of the defendant and other factors on outcomes. A third possibility is that the finding of discrimination effects, albeit on the wrong judgment, was a pattern that bolstered the author's argument, so it was accepted and quoted with little further examination or analysis. Such sloppy scholarship results when the author's interest in empirical evidence is more in the nature of brief writing than academic scholarship.

The final member of this species is the **Clam/Critic**. The clam/critic is exquisitely sensitive to disturbances in the water and quick to shut out empirical research. No empirical study or set of studies can ever be good enough to persuade. It is either hopelessly flawed, or simply irrelevant. Justice William Rehnquist has shown some inclination in this direction. In *Lockhart v. McCree*,[26] the Court was presented with fifteen studies conducted by a variety of different researchers showing that jurors in capital cases who are screened for their willingness to impose the death

22. I have specifically chosen this example because I am concerned about the danger of silencing voices with nonunanimous decision rules, but reject the misuse of empirical evidence to support that position.

23. Kim Taylor-Thompson, *Empty Votes in Jury Deliberations*, 113 HARV. L. REV. 1261, 1295 (2000).

24. Laura T. Sweeney & Craig Haney, *The Influence of Race on Sentencing: A Meta-Analytic Review of Experimental Studies*, 18 BEHAV. SCI. & L. 179 (1992).

25. *See* Sheri Lynn Johnson, *Black Innocence and the White Jury*, 83 MICH. L. REV. 1611, 1637 (1985).

26. 476 U.S. 162 (1986).

penalty (i.e., are death-qualified) are also more likely to vote to convict. Each study was arguably imperfect, but all used different methodologies and produced convergent results. Justice Rehnquist's opinion raised objections to each study, one by one, treating all but one as without any value. When he had rejected all but one, he then concluded that one study was not enough to influence the Court's decision. Were there weaknesses to criticize in each of the studies? Certainly. Did the group of studies produce a body of evidence that provided convincing support for the claim being made? Most academics who have studied juries were convinced that it did.[27]

It would have been possible for the majority in *Lockhart* to reach a decision upholding death-qualification without rejecting the findings of the empirical studies—by deciding as a matter of law that a violation of the fair cross-section requirement of the Sixth and Fourteenth Amendments should not be found in the elimination of prospective jurors based on shared attitudes. In fact, the analysis and rejection of the empirical research in the opinion was superfluous. The Court went on to find that, even if it accepted the conclusion from the empirical evidence that "death qualified" juries are more likely to convict than "non-death qualified juries," the Constitution "does not prohibit the States from death qualifying juries in capital cases."[28] What Justice Marshall, writing for the minority, describes as a "disregard for the clear import of the evidence,"[29] is what qualifies the reaction of the majority as that of a clam/critic in the empiricism typology. A similar perspective on the role of empirical research can be found within the academic community. Ronald Dworkin, for example, has been criticized for "insist[ing] that cases in which facts or consequences matter to sound constitutional decisionmaking are 'rare.'"[30]

B. Dolphins

Moving cross-species to the second column in Figure 1, we find the dolphin, for whom empirical research is a method of scholarship that presents opportunities for engagement and stimulation. For the **Dolphin/Doer**, doing empirical research is a way to explore and increase understanding of the law and legal institutions. A scholar who wants to understand the consequences of class actions could examine the procedural rules that create them and could construct models of how they ought to influence litigation, but the dolphin/doer also will want to look at what kinds of class actions are brought, what success they have, how changes in the law affect the results—empirical evidence as a tool for understand-

27. Brief of Amicus Curiae American Psychological Association in Support of Respondent at 15, Lockhart v. McCree, 476 U.S. 162 (1986) (No. 84-1865).

28. *Lockhart*, 476 U.S. at 173.

29. *Id.* at 192.

30. Richard A. Posner, *Against Constitutional Theory*, 73 N.Y.U. L. REV. 1, 12 (1998).

ing. The obvious examples of members of the legal academy who are occupants of this category are those with Ph.D.s in a wide variety of social science disciplines: Phoebe Ellsworth (Psychology) and Richard Lempert (Sociology) at Michigan, John Ferejohn (Political Science) at Stanford, Arthur McEvoy (History) at Wisconsin, and Lewis Kornhauser (Economics) at NYU.[31] But the legal academy also has many scholars not originally trained as social scientists who have added empirical methods to their tool boxes. An instructive example is Deborah Jones Merritt, whose early work focused solely on doctrinal analysis.[32] She first turned to empirical research to address questions about the impact of race and gender on scholarly influence[33] and more recently has applied those tools to studies of the behavior of federal courts of appeals[34] and to test claims about the tort system.[35] She has continued to write about constitutional theory[36] and offered a strong defense of its value in response to Judge Richard Posner's *Against Constitutional Theory*,[37] arguing for the place of both constitutional theorists and empiricists, and calling for greater dialogue and interaction between the two.

The **Dolphin/User** occupies the center of the matrix in Figure 1, and that placement is no accident. This character, an intellectual squarely rooted in the traditional legal academy, is one who also recognizes the opportunities that empirical and other methods of inquiry can offer. Unlike the clam/user, the dolphin/user reads widely and deeply, attentive to methodological strengths and limitations in what she reads. The crucial difference between dolphins and clams in their use of empirical research is that the dolphin engages in what psychologists refer to as central processing while the clam engages in peripheral processing.[38] Central or systematic processing occurs when a person carefully scrutinizes a message and examines the quality of the arguments that are being made.

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31. To reduce the impression that I am describing merely a local phenomenon, I have intentionally excluded from this set of examples my colleagues at Northwestern and the American Bar Foundation and coauthors who also would qualify for the list.

32. *See, e.g.*, Deborah Jones Merritt, *The Guarantee Clause and State Autonomy: Federalism for a Third Century*, 88 COLUM. L. REV. 1 (1988) [hereinafter Merritt, *The Guarantee Clause*]; Deborah Jones Merritt, *Three Faces of Federalism: Finding a Formula for the Future*, 47 VAND. L. REV. 1563 (1994) [hereinafter Merritt, *Three Faces of Federalism*].

33. Deborah Jones Merritt & Barbara F. Reskin, *Sex, Race, and Credentials: The Truth About Affirmative Action in Law Faculty Hiring*, 97 COLUM. L. REV. 199 (1997).

34. James J. Brudney et al., *Judicial Hostility Toward Labor Unions? Applying the Social Background Model to a Celebrated Concern*, 60 OHIO ST. L.J. 1675 (1999); Deborah Jones Merritt & James J. Brudney, *Stalking Secret Law: What Predicts Publication in the United States Courts of Appeals*, 54 VAND. L. REV. 71 (2001).

35. Deborah Jones Merritt & Kathryn Ann Barry, *Is the Tort System in Crisis? New Empirical Evidence*, 60 OHIO ST. L.J. 315 (1999).

36. Deborah Jones Merritt, *Commerce!*, 94 MICH. L. REV. 674 (1995).

37. *See generally* Deborah Jones Merritt, *Constitutional Fact and Theory: A Response to Chief Judge Posner*, 97 MICH. L. REV. 1287 (1999); Posner, *supra* note 30.

38. *See generally* Alice H. Eagly & Shelly Chaiken, *Attitude Structure and Function*, *in* 1 THE HANDBOOK OF SOCIAL PSYCHOLOGY 269 (Daniel Gilbert et al. eds., 1998); Richard E. Petty & Duane T. Wegener, *Attitude Change: Multiple Roles for Persuasion Variables*, *in* 1 THE HANDBOOK OF SOCIAL PSYCHOLOGY, *supra*, at 323.

In contrast, peripheral processing occurs when the person takes mental shortcuts. Rather than arriving at a decision based on the quality of the argument, the person relies on cues such as the purported expertise of the source. For the peripherally processing clam/user, it is enough that the claim supports the preferred position, and that it has been published and can be cited. For the centrally processing dolphin/user, it is necessary to look closely at theory and method, and the fit between the two, to evaluate whether and how an empirical claim will be considered.

Legal dolphins, however, may lack an environment that exposes them to ongoing empirical research that will stimulate in-depth systematic processing of empirical evidence. Relatively few law schools are set up to provide support for empirical research that depends on nonarchival sources unavailable through libraries. Recently, additional data sources have become available over the Internet and from various archives, but relatively few law schools have the research facilities and trained graduate students necessary to mount studies that require space and substantial research assistance from students with experience in data collection and analysis. Yet where legal scholars trained in traditional doctrinal research are exposed to empirical research by their colleagues in the law school or from other departments on campus, or they seek out relevant empirical research, these sophisticated scholars can use their considerable intellectual power to study and evaluate what empirical research has to offer. Richard McAdams is a prime example of this genre. His articles on expressive law[39] theorize that law influences behavior by what it says in addition to the sanctions it imposes. Much of his analysis draws on a critical assessment of the wide range of empirical research that bears on the behavior and impact of law. Whether McAdams' use of empirical research is cause or effect, the result is a behaviorally informed picture of how law operates that is far more nuanced than what either traditional legal scholarship or standard economic analysis offers.

The **Dolphin/Critic** is a less visible, sometimes underappreciated, member of the community. This character may or may not do or use empirical research; her distinctive characteristics are her willingness and ability to analyze the empirical work of others. Legal scholars in this category are smart and critical, but they are constructive, and constructive critics are valuable. One aspect of being a member of a law faculty is the opportunity to draw on the well-honed critical skills of your colleagues. But not just any critic will do. The key here is that this critic, like the other members of the dolphin class, likes to play, whether it is with theories or with methods. For this critic, empirical methods are a stimulating way to approach knowledge, but they are frequently flawed

39. Richard H. McAdams, *A Focal Point Theory of Expressive Law*, 86 VA. L. REV. 1649 (2000); Richard H. McAdams, *An Attitudinal Theory of Expressive Law*, 79 OR. L. REV. 339 (2000); *see also* Richard H. McAdams, *Signaling Discount Rates: Law, Norms, and Economic Methodology*, 110 YALE L.J. 625 (2001).

or incomplete. For the dolphin/doer toiling to produce high quality empirical research, this critical eye is a stimulus to better research. Much of the work of the dolphin/critic is invisible in the published literature, appearing in workshops and over coffee. After all, publication is not the primary research focus of the dolphin/critic. Nonetheless, it is, or ought to be, an important role in the world of empirical scholarship about the law.

C. Plankton

The final species is the **Plankton**, buffeted about by the atmosphere that surrounds them. Outside the legal academy in many social science departments, there are one or two members of the faculty who are called on for statistical advice. They provide an important service, but they rarely make substantive contributions to the field. The analog in the legal community is the empiricist who plays the same role—e.g., when the user needs a citation; when the administration wants to conduct a survey. These are valuable contributions to the community that empiricists should generally be willing to make, but if they occupy too much time, the result is a **Plankton/Doer** whose identity is submerged in service activity.[40]

The **Plankton/User** is a fair-weather friend of empirical methods. This year it is empirical research, last year it was critical legal studies, next year it will be something else. Empirical methods are a fashion to be adopted and discarded with the next trend. If plankton-like interest in empiricism characterized the dominant form of interaction with empirical research, the flow of empirical citations as ornaments, let alone more serious activity, would soon be reduced to a trickle. Only time can reveal whether the current interest will endure, but there is reason to be optimistic in light of the evidence that law schools are increasingly hiring faculty with both Ph.D.s and law degrees.[41]

Finally, the **Plankton/Critic** may be characterized as indifferent: critical if the dominant local opinion rejects the value of empirical methods, and an undependable base of support or interest when disagreements arise. Like the other members of the plankton species, her influence is passive rather than active. Nonetheless, as with all of the members of the plankton group, her passive resistance can make a difference in hiring decisions and on other occasions when opportunities arise to give or take away resources.

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40. Note that I do not refer here to social scientists who collaborate on research with colleagues who lack advanced training in empirical methods. As suggested *infra*, these collaborations are a primary way to produce sophisticated empirical research, and they are most likely to have that outcome when the collaborators are full partners in the project. Plankton, in contrast, are merely technical advisers.

41. *See* David E. Van Zandt, *The Northwestern Law Approach to Strategic Planning*, 31 U. TOL. L. REV. 761, 768 (2000).

V. PREDICTING THE FUTURE

The typology presented in Figure 1 describes the variety of perspectives and activity that can be seen in legal circles, but it does not indicate how the distribution of occupants in the nine categories is likely to change over time and what implications the direction of those changes will have for the health of empirical research on the law. Judging from my own law school, the reports of colleagues at other law schools, and the conference that generated this paper, I would say that the future looks promising. I recognize that, as a psychologist/lawyer who conducts empirical research as a faculty member in a law school, my perspective may not be entirely objective (and its empirical base is no doubt skewed).[42] I can offer with some confidence, however, some contingent predictions that draw on the typology. First, it is the species (the columns) rather than the activities (the rows) that will determine the future success of empirical research in the legal world. The success of the empirical enterprise is not assisted by clam/doers who misuse empirical methods, by clam/users who draw on empirical results indiscriminately, or by plankton who are willing to "go along." Enthusiasm and acceptance will be short-term if they are not grounded. The key is the dolphin both because of her deeper involvement with empirical research, whether as doer, user, or critic, and because of her habitual pattern of interaction. It is no accident that many of the traditionally trained legal academics who have contributed most heavily to the empirical literature have done so through collaboration. The jury research of Harry Kalven Jr. (with sociologist Hans Zeisel)[43] and the procedural justice work of Laurens Walker (with psychologist John Thibaut)[44] are but two examples. Deborah Jones Merritt's research is also telling. Her constitutional scholarship is sole-authored, but her empirical work is the product of a series of collaborations.[45]

A second contingent prediction is that the health of empirical scholarship in the legal academy will depend more on growth in the population of dolphin/*users* than of dolphin/*doers*. The serious users can bridge

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42. Law students at Northwestern, as at many other law schools, have electives available to them that are explicitly interdisciplinary: law and economics; law and the social order; American legal history; law and psychology—the "Law &s." As part of regular discussions about the curriculum, we convened a group of faculty members to discuss the "Law &" curriculum. The notice to the faculty invited their attendance and contribution of a class syllabus for circulation "if you draw significantly on interdisciplinary material in teaching a course." More than one-third (15/36) of the tenured or tenure-track faculty not on leave attended the meeting or submitted a syllabus. Northwestern has an unusually large percentage of faculty who have both Ph.D.s and J.D.s, but the significant feature of the gathering was that it also drew faculty who see themselves as traditional legal scholars, but who use findings from empirical research in their teaching.

43. *See generally* HARRY KALVEN, JR. & HANS ZEISEL, THE AMERICAN JURY (1966).

44. *See generally* JOHN THIBAUT & LAURENS WALKER, PROCEDURAL JUSTICE (1975).

45. *See generally* Merritt, *supra* note 36; Merritt, *The Guarantee Clause*, *supra* note 32; Merritt, *Three Faces of Federalism*, *supra* note 32; Merritt & Barry, *supra* note 35; Merritt & Brudney, *supra* note 34; Merritt & Reskin, *supra* note 33.

the gap between the doers and the critics, and they can recruit from the clams and the plankton. They can also substantially increase the yield from the findings that empiricists produce. Of course, dolphins who spend most of their time as users may also become participants in the creation of empirical research themselves, but it is their other contributions that are crucial in order for empirical scholarship to flourish.

VI. CONCLUDING REMARKS

As judges have come to learn in the wake of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,[46] struggling with scientific evidence is no easy matter. It does, however, offer the promise of knowledge that is currently unavailable, or is at least more dependable than assumptions based solely on "fireside inductions."[47] Some might claim that the only way to really understand science is to do it. It is surely true that doing science is one good way to learn about it, but I would not argue that legal scholars must become social scientists in order for the legal academy to profit from a serious exchange with social science any more than I would insist (though some no doubt would) that a law degree is required to do serious social scientific research on the law. What is required in both instances is a deep understanding of legal and scientific reasoning, and an appreciation of what law and science each recognize as strong and weak evidence, and why. Of course, the simplest, albeit the most time-consuming, way to gather such knowledge is through formal instruction and a second graduate degree. Another way is to work closely with a colleague who has been trained in another discipline. A third way is to read legal scholarship and both the empirical *and* the methodological literature so there is no need to make unwarranted assumptions about legal theory or to uncritically accept or reject empirical findings. If empirical research is to add to the arsenal of legal scholarship, it will need wider participation from scholars with a variety of different agendas and skills. Ultimately, the place of empirical work in the legal academy will depend upon all of these approaches.

46. 509 U.S. 579 (1993).

47. Paul E. Meehl, *Law and the Fireside Inductions: Some Reflections of a Clinical Psychology*, 27 J. SOC. ISSUES 65 (1971); *see also* Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. 1 (2002).